

US 31 at SR 10 & US 31 at SR 110 J-Turn Intersection Improvement

Tuesday, June 20, 2017

Welcome

- Chris Waidner, Troyer Group VP, Director of Transportation
- Purpose/explanation of public information meeting
- Public information meeting format
- Visit our sign-in table
- Informational handouts
- Submitting written public comments
- Project display area



US 31 at SR 10 & US 31 at SR 110 J-Turn

- **Introduction of INDOT Project Team**

- Project Management
- Public Involvement
- LaPorte District – INDOT Regional Office
- Environmental Services
- Real Estate
- Troyer Group
 - Engineering, Design & Environmental Analysis Team

- **Recognition of elected and local public officials**

- Sign-in at attendance table to be added to project mailing list
- A notice of the public information meeting was mailed to known property owners within project area
- Announcement of this public information meeting was posted to INDOT website. A media release was also issued.
- A copy of presentation and project documentation is available on-line via INDOT website.

Project Stakeholders

- Indiana Department of Transportation
- Indiana Division Federal Highway Administration
- Marshall County & Town of Argos
- Elected & Local officials
- Residents and citizens
- Commuters
- Businesses
- Emergency services
- Schools
- Churches
- Community Organizations



Project Development



Public Involvement:

**Public Information
Meeting**

**Offer opportunity
to request a public
hearing**

**Communicate project
decision**

Environmental Document

National Environmental Policy Act (NEPA)

- Requires INDOT to analyze and evaluate the impacts of a proposed project to the natural and socio-economic environments
- NEPA is a decision-making process
 - Purpose and Need
 - Alternatives Screening
 - Preferred Alternative
- **Impacts are analyzed, evaluated and described in an environmental document**
 - What are the impacts this project might have on the community?
 - How can impacts be avoided?
 - Can impacts be minimized?
 - Mitigation for impacts?
- **Draft environmental document to be released for public involvement**
 - Will be available for review via public repositories

Project Resource Locations

- **INDOT LaPorte District Office**
315 E. Boyd Boulevard, LaPorte, IN 46350
 - Toll Free 1-855-464-6368
 - LaPorteDistrictCommunications@indot.in.gov
 - <http://www.in.gov/indot/2705.htm>
 - Planning, Project Development/Delivery, Construction, Maintenance for Northwest Indiana
- **Argos Public Library** - 142 N Michigan St., Argos, IN 46501
- **INDOT Office of Public Involvement**
100 North Senate Avenue, Room N642, Indianapolis, IN 46204
Phone (317) 232-6601
rclark@indot.in.gov



US 31 at SR 10 & US 31 at SR 110 J-Turn

- **Project purpose is to enhance intersection safety**
- **Project Needed due to high crash rates**
 - Both intersections are among the highest 5% in crash rate throughout the entire state
 - Large number of **injury crashes**:
 - 20 at SR 10 since 2012
 - 11 at SR 110 since 2010
 - At SR 10, the RR viaduct to the south inhibits sight distance

Crash Data

Crash Data for US 31 at SR 10 (2012-2016)						
SEVERITY	2012	2013	2014	2015	2016	Total
Crash with no Injury	1	2	4	8	5	20
Non-Incapacitating Injury	1	-	3	4	-	8
Incapacitating Injury	1	-	5	-	5	11
Fatal	-	-	1	-	-	1
TOTALS	3	3	13	12	10	40

Crash Data for US 31 at SR 110 (2012-2016)						
SEVERITY	2012	2013	2014	2015	2016	Total
Crash with no Injury	5	1	2	4	3	19
Non-Incapacitating Injury	3	2	-	1	1	7
Incapacitating Injury	1	1	-	2	-	4
Fatal	-	-	-	-	-	-
TOTALS	9	4	2	7	4	25

Existing Intersection Geometry

- Crashes most often involve through movements and left turns being struck on the far side of the wide intersection.



Alternatives Considered

- **No Build**

- Would not improve safety at intersection

- **Signalized Intersection**

- Traffic on minor legs (SR 10 and SR 110) do not warrant a signalized intersection when compared to traffic on major leg (US 31)

- **Interchange** (specifically at SR 10)

- Still under consideration, but would be done as a separate project

- **J-Turn Intersection (Preferred Alternative)**

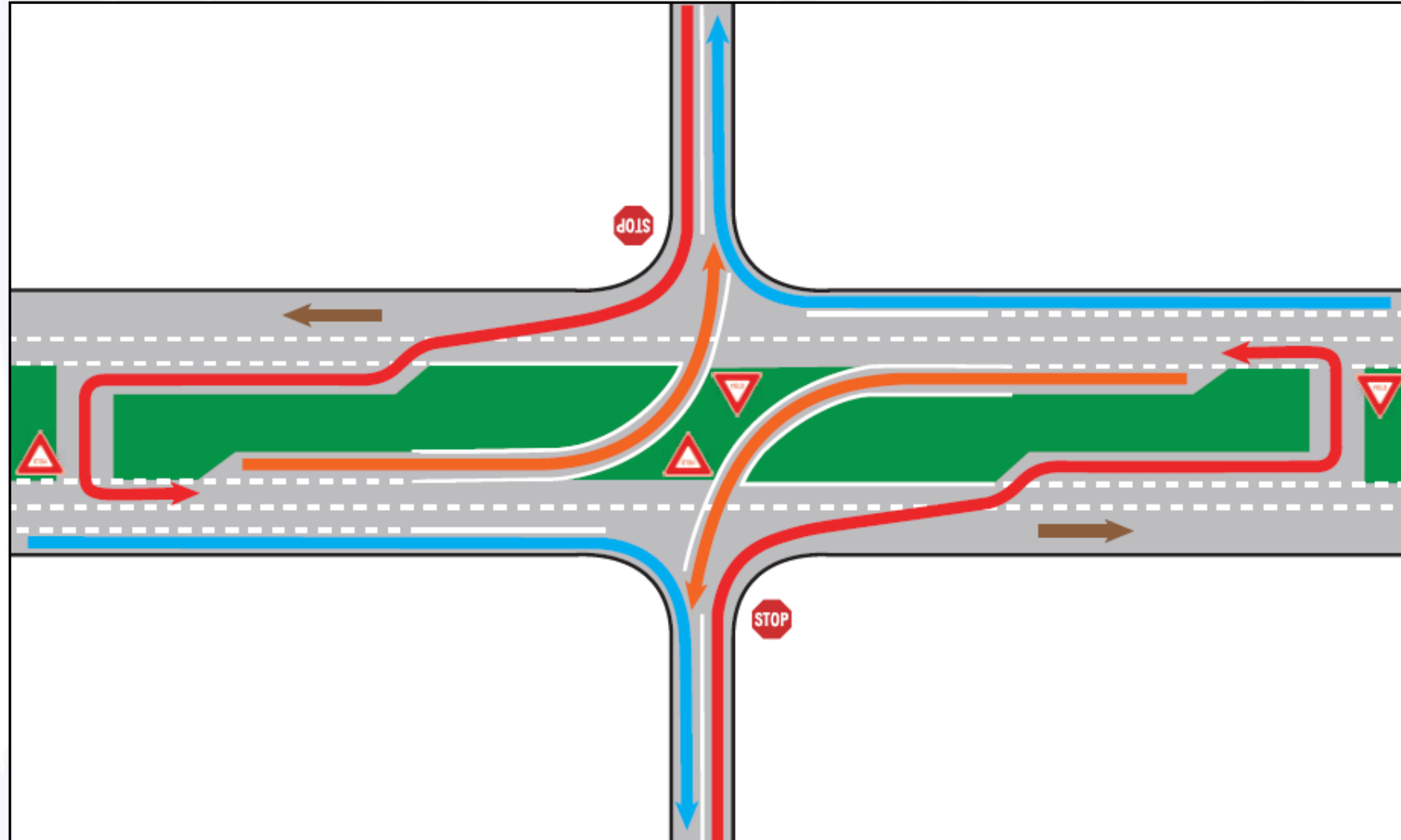
- Meets purpose & need of project
- Enhances safety at intersection by eliminating or significantly reducing injury crashes

INDOT Statement Regarding Potential Interchange

- *INDOT is developing a strategy to upgrade US 31.*
- *Location of interchanges will be based on:*
 - *Traffic Volume*
 - *Safety*
 - *Access*
 - *Consistency with regional road network*
 - *Cost*
- *Interchanges will be built over time due to fiscal and time constraints.*
- *Immediate operational and safety concerns on US 31 will be addressed with small, cost-effective solutions, in meantime.*
- *Immediate improvements will not impact plan for fully upgraded US 31 corridor.*

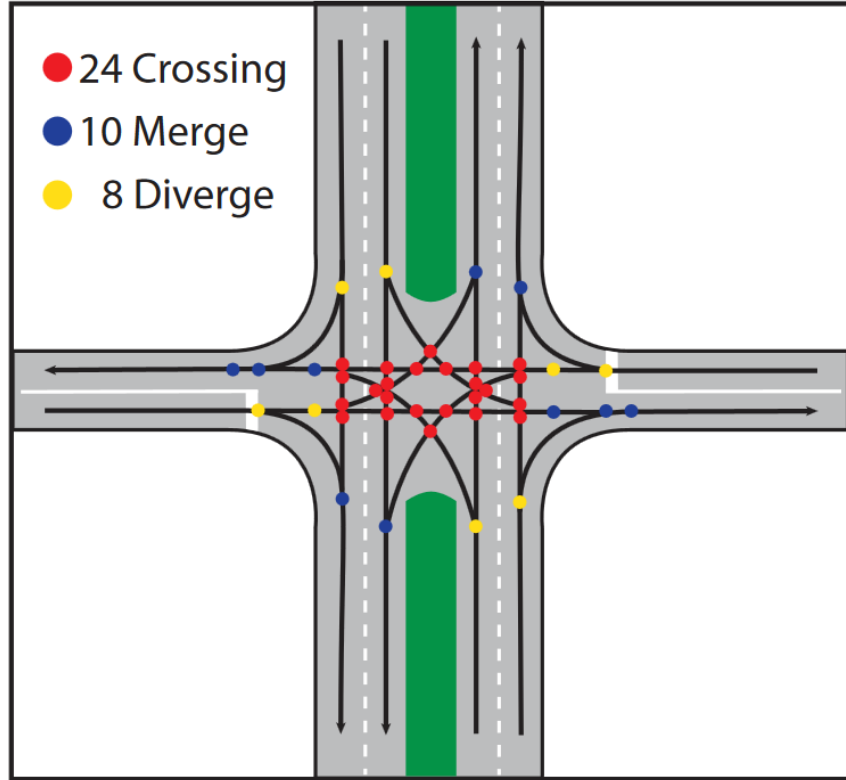
J-Turn – INDOT Preferred Alternative

- Left turns and crossing minor roads are made using U-turn movement on major road.
- Left turns from major road are made under yield (as current)



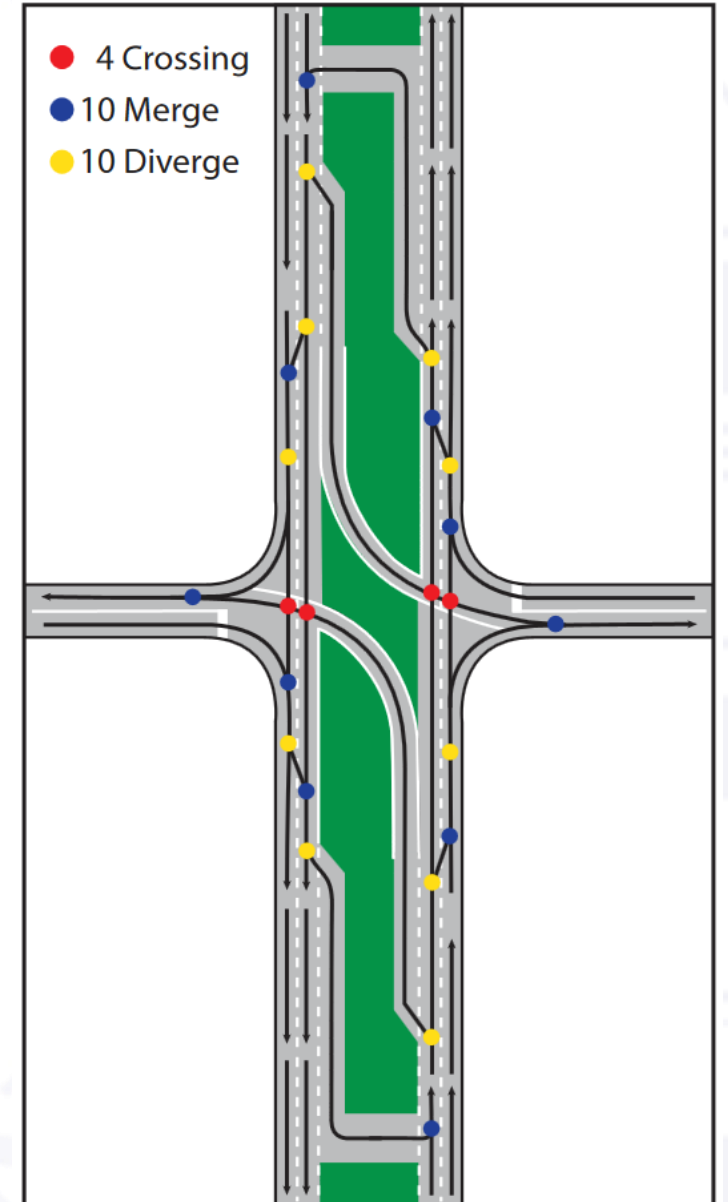
Benefits of J-Turns

- **Conflict points are dramatically reduced**



Conventional
Intersection

J-Turn
Intersection



Benefits of J-Turns

- **Reduces crashes and severity significantly**

Case Studies Collision Summary by Type			
	Before	After	%Change
Rear End	13	8	-38 %
Angle	47	0	-100 %
Turning	32	10	-69 %
Sideswipe	8	3	-63 %
TOTALS	100	21	-79 %

Case Studies Collision Summary by Severity			
	Before	After	%Change
Injury	56	10	-82 %
Fatality	2	1	-50 %

Source "Spot Safety Project Evaluation", #02-00-208/02-00-209 #11-99-210 #14-97-018 NCDOT Safety Evaluation Group, 2005 and 2006

Benefits of J-Turns

- Improved Capacity
- Reduced Intersection Delay
- Low Cost relative to other improvement alternatives
 - No additional Right-of-Way necessary
- May delay the need for traffic signal or interchange



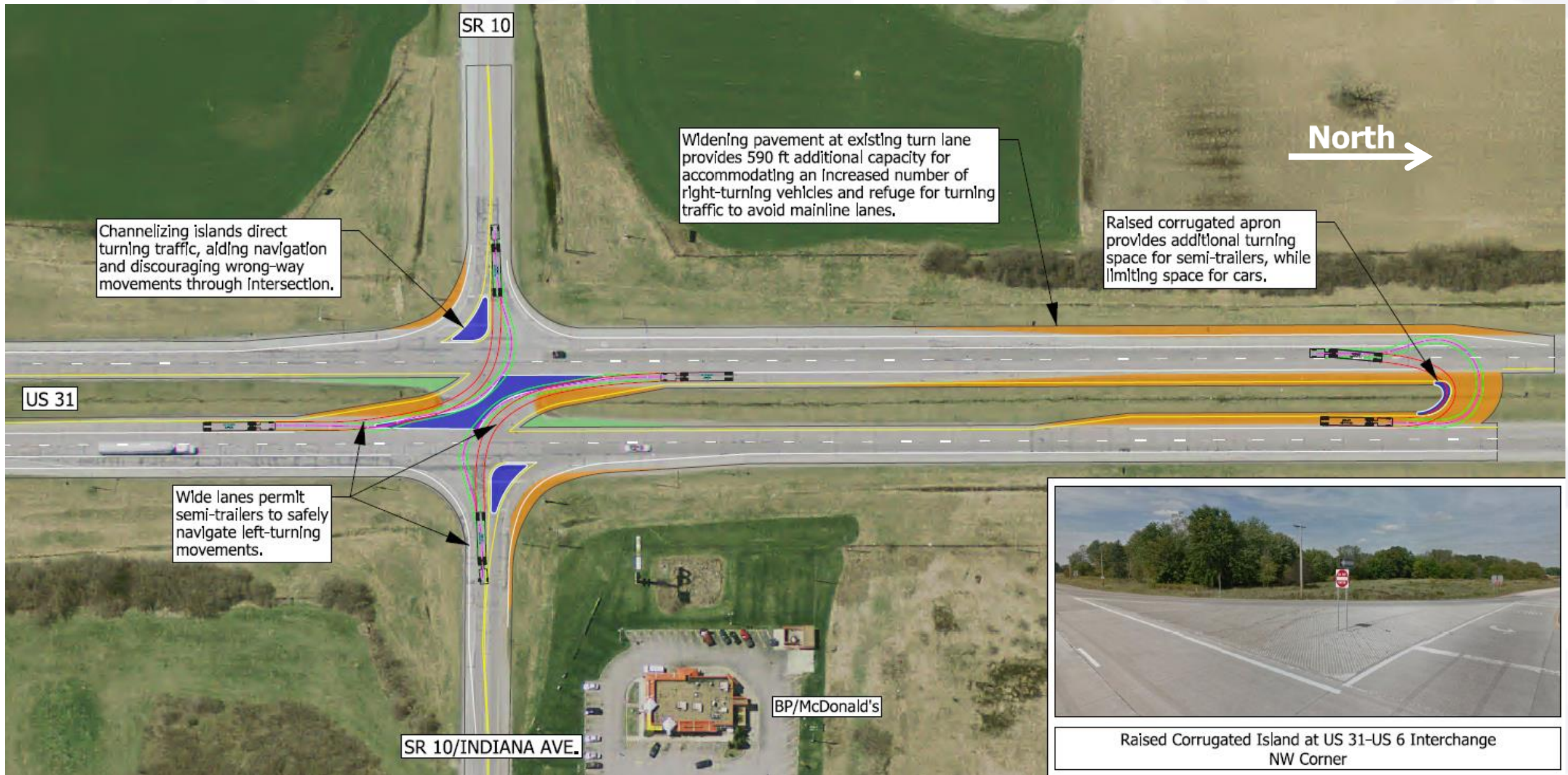
Traffic Simulation – Example



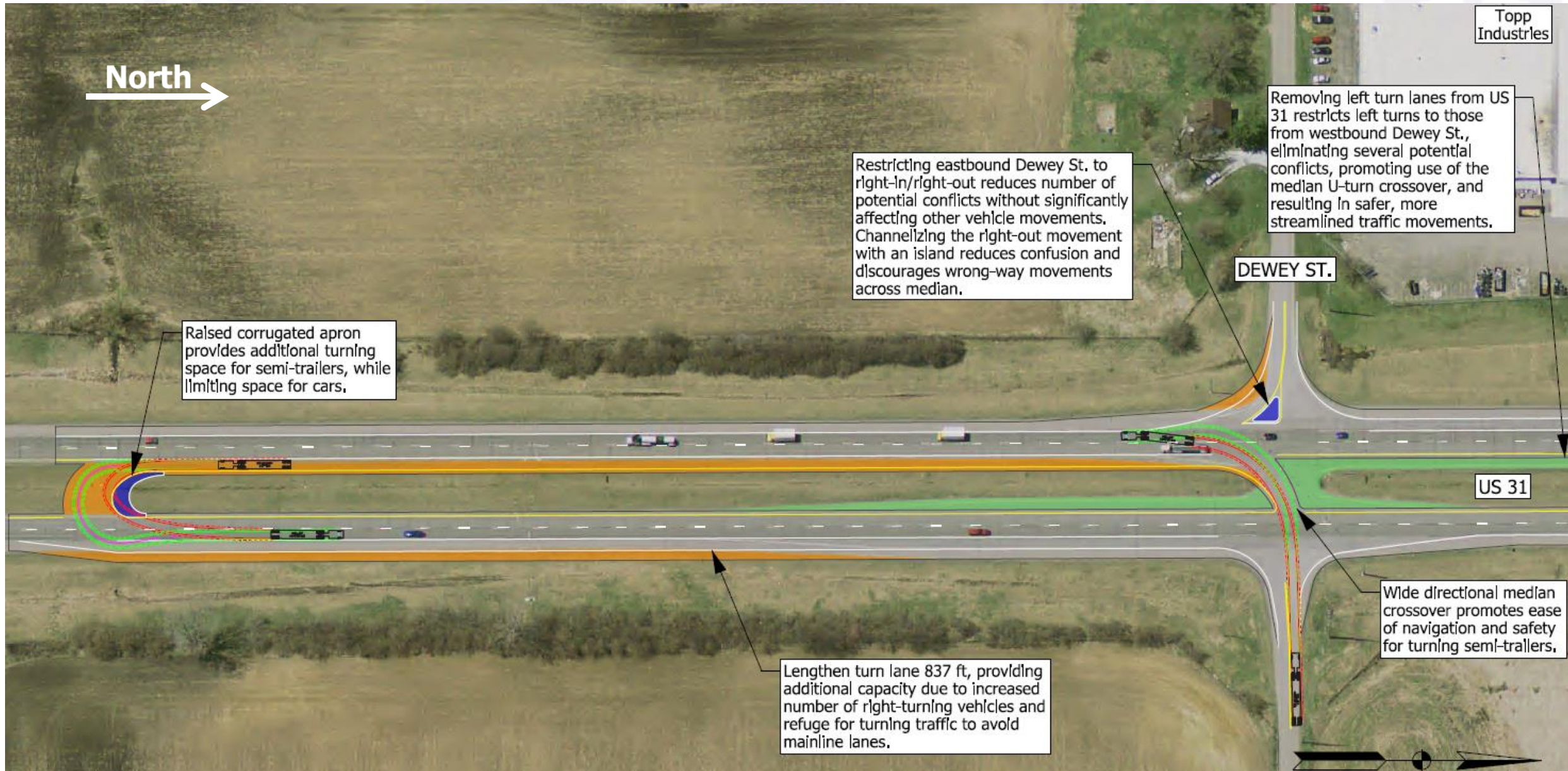
J-Turn Layout - US 31 at SR 10



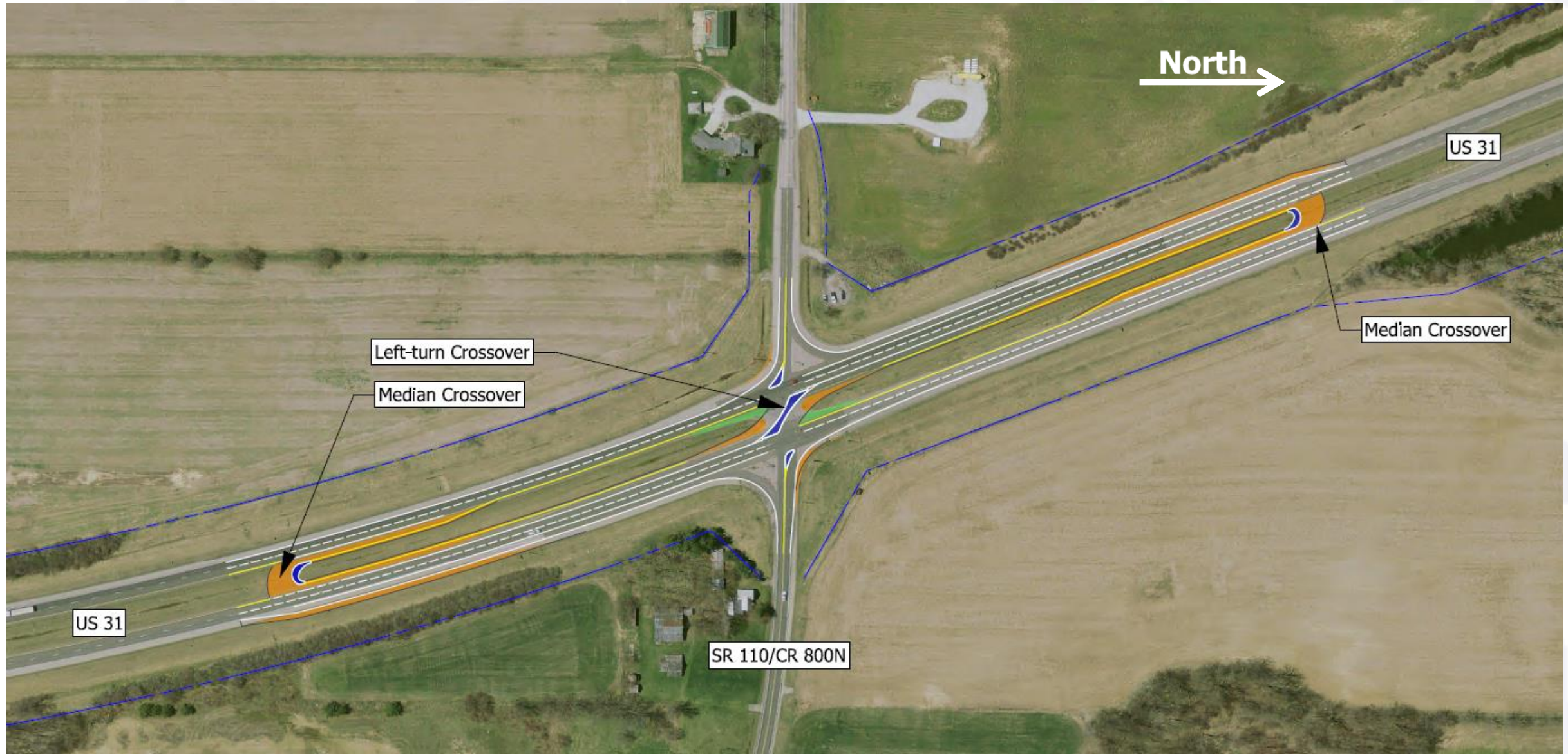
North Crossover - US 31 at SR 10



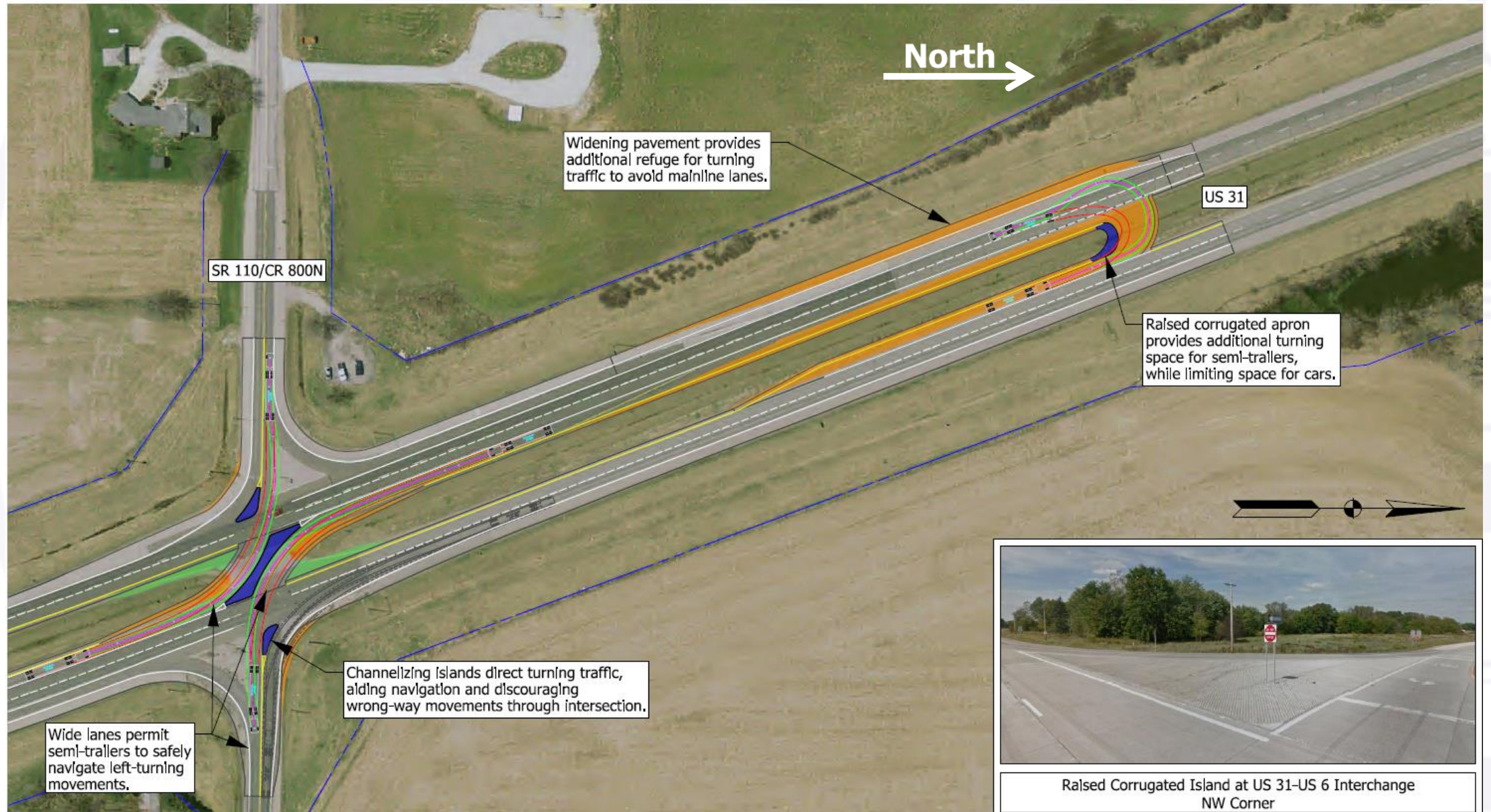
South Crossover - US 31 at SR 10



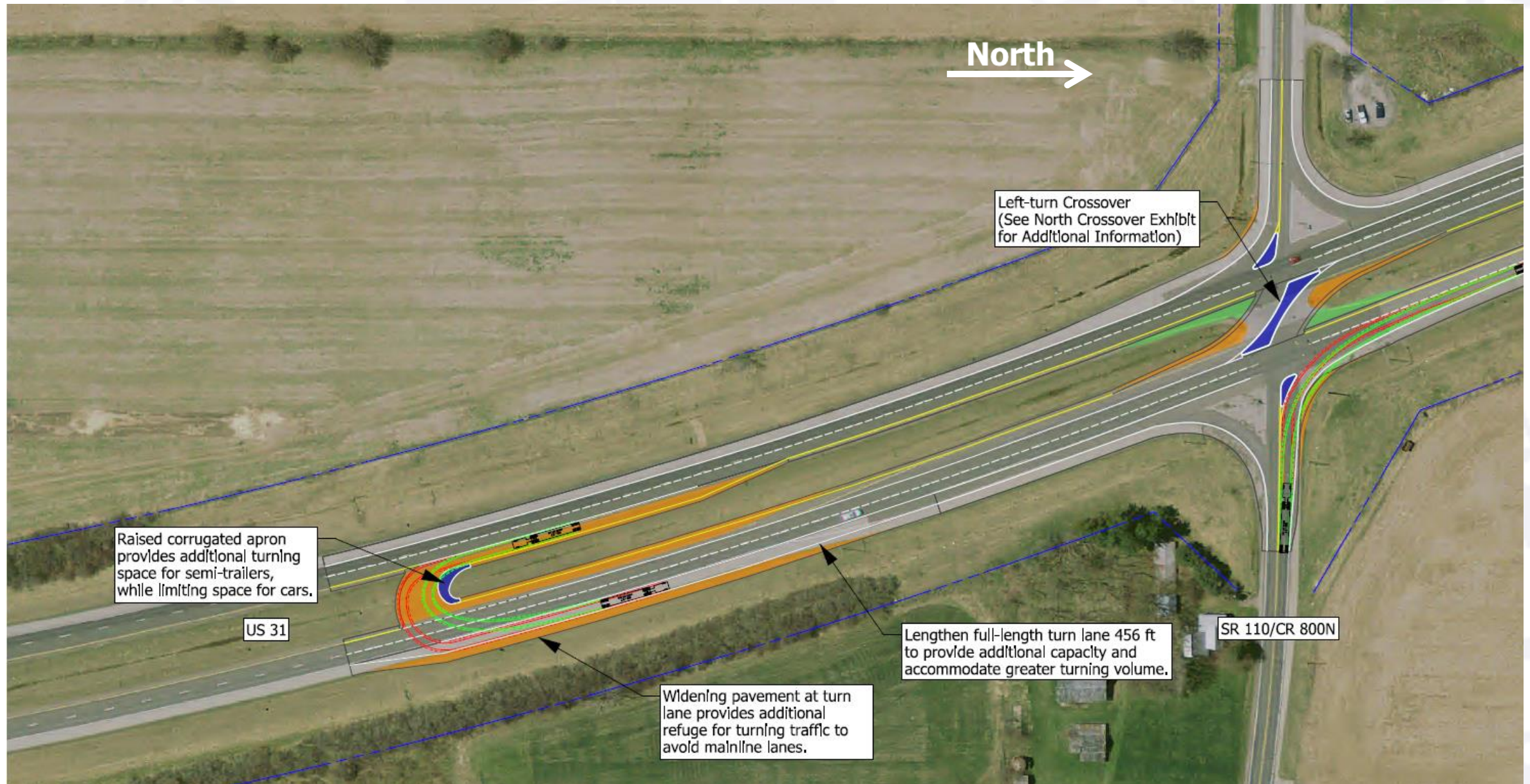
J-Turn Layout - US 31 at SR 110



North Crossover - US 31 at SR 110



South Crossover - US 31 at SR 110



Recent Case Study

- US 41 at SR 114, near Morocco, IN
- First J-turn intersection in Indiana
- Improvement needed to reduce injury accidents
- New intersection alignment opened in May, 2015
- Zero injury accidents in two years since opening

Before:



After:



Project Schedule

- Public Information Meeting: 6/20/17
 - Public comments requested by 7/10/17
- Draft NEPA document complete by September, 2017
 - Additional public involvement – offering opportunity to request a public hearing
- NEPA Document and Design complete by November, 2017
- Construction: Summer, 2018

Submit Public Comments

- **Submit public comments using the options described in first page of information packet:**
 - Public Comment Form
 - Via e-mail
- **INDOT respectfully requests comments be submitted by Monday, July 10, 2017**
- All comments submitted will be reviewed, evaluated and given full consideration during decision making process.

Next Steps

- **Public and project stakeholder input**
 - Submit comments via options described on page 1 of information packet
- **INDOT review and evaluation**
 - All comments are given full consideration during decision-making process
 - Finalize/approve environmental document, complete project design
- **Communicate a decision**
 - INDOT will notify project stakeholders of decision
 - Work through local media, social media outlets; paid legal notice
 - Make project documents accessible via repositories
- **Questions? Contact Public Involvement Team**



Thank You

- **Please visit with the design team and INDOT project officials following the presentation and Q&A.**
- **Project Open House**
 - Project maps, displays, real estate acquisition table, INDOT project team and informal Q & A
 - INDOT LaPorte District page <http://www.in.gov/indot/2705.htm>
 - LaPorteDistrictCommunications@indot.in.gov